



<b>Classification:</b> Electrical Engineer	<b>Position No.</b> 3300-3613-001
<b>CBID:</b> R09	<b>Office:</b> Energy Systems Research Office
<b>Date Prepared:</b> March 2019	<b>Division:</b> Energy Research & Development Division
<b>KEY: (E) IS ESSENTIAL, (M) IS MARGINAL</b>	

#### CONFLICT OF INTEREST STATEMENT

This position is designated under the Conflict of Interest Code: YES ☒ NO ☐

If yes, this position is responsible for making or participating in the making of governmental decisions that may potentially have a material effect on personal financial interests. The appointee is required to complete Form 700 within 30 days of appointment, which identifies pertinent personal financial information.

Under the general direction of the Electric Generation System Specialist III, the incumbent serves as part of an interdisciplinary team to plan and implement the Energy Research and Development Division's (ERDD) research program. Performs less complex electrical engineering and electronic engineering work on the integration of distributed energy resources (DER), including energy storage systems, renewable DERs, power electronics technology, grid power flow analysis, demand response (DR), application of communications and control systems, and microgrids.

#### DUTIES AND RESPONSIBILITIES:

PERCENTAGE OF TIME PERFORMING DUTIES	INDICATE THE DUTIES AND RESPONSIBILITIES ASSIGNED TO THE POSITION AND THE PERCENTAGE OF TIME SPENT ON EACH. GROUP RELATED TASKS UNDER THE SAME PERCENTAGE WITH THE HIGHEST PERCENTAGE FIRST; PERCENTAGE MUST TOTAL 100%.
40%	<u>Engineering Assessment.</u> Read, analyze, interpret, and evaluate the electrical and electronic plans, drawings, specifications and other technical information for the advancement, demonstration and deployment of integrated DERs such as renewable technologies (e.g., photovoltaic and wind), energy storage technologies, and communication/control systems to ensure the integrated DER systems meet or exceed identified electrical design specifications and provide reliable, safe and cost-effective options. Evaluate electrical power flow and grid electrical interconnections which includes preparing or reviewing material lists and requisitions material selection and specifications, performance and suitability of components, efficiency and economics of engineering design options, cost, and performance. Evaluate electrical delivery systems (distribution or transmission) performance and energy efficiency improvements from a state-wide strategic perspective. Conduct field surveys, site visits and inspections of R&D funded DER demonstrations to ensure field systems comply with electrical requirements and engineering specifications in contracts that include: electrical codes, building standards, CEQA requirements, and other required general engineering codes, standards or directives. Review electrical, engineering and system performance data at field and laboratory demonstrations to ensure system performance meets or exceeds specific electrical engineering and overall system performance specifications defined in legal agreements. (E)
30%	<u>Agreement Management.</u> Prepare funding and grant agreement documents; establish and maintain proactive technical and business relationships with R&D recipients by providing guidance and direction to recipients as needed; proactively monitor progress and identify possible changes in research direction; initiate and approve agreement amendments;

**DUTY STATEMENT**

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	receive and review monthly progress reports and prepare evaluations and detailed electrical engineering assessments of the project; verify all contract terms and conditions are met before approving invoices; conduct independent and in-depth technical reviews and engineering specification reviews; initiate detailed project site inspections to ensure the project meets technical, fiscal, and administrative objectives; brief office, division, and commission management on the status of the project. (E)
15%	<u>Solicitation Management</u> . Prepares research project plans, specifies research project tasks and estimates research budgets for research projects. Analyze and evaluate research plans, specifications and estimates to meet various electrical codes, safety orders and regulations governing the design and installation of electrical equipment and apparatus, and other similar power installations. Analyze proposals to determine how well the proposed research addresses the scope of the solicitation criteria including, but not limited to: the extent the project would advance science or technology, address market issues and needs, meet specified target goals and objectives; project team skills and experience to perform the technical tasks within the budget and schedule, the ability to move the results into the marketplace; and the adequacy of project funding. Prepare written findings of such evaluations for use by a technical scoring committee. (E)
10%	<u>Technology Transfer</u> . Oversee the finalization of project reports, fact sheets, annual reports and other documents to disseminate research results and lessons learned to Energy Commission staff and others with a focus on transferring information that provides significant public benefits to California and meets the state's energy policies and goals. (E)
5%	Perform other duties as required consistent with the classification's specification. (M)

**WORKING CONDITIONS:** The work is performed primarily in an indoor office and meeting room setting involving sitting, standing, and walking as well as sitting for long periods of time. Travel is required to conduct project site visits, attend workshops, hearings and meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required. While performing the duties described above, the incumbent will be required to work alone and/or in a team environment; utilize a personal computer and appropriate Energy Commission software such as Microsoft suite of software, electronic mail, Internet and analytical models. The incumbent will be required to plan, organize, assist and/or participate in meetings with other Energy Commission staff, staff from other federal and state agencies, consultants, contractors, and other parties active in energy-related research and development.

SIGNATURES	
I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position	
<div></div> <div>Employee</div> <div>Electrical Engineer</div>	<div></div> <div>Date</div>
<div></div> <div>David Erne</div> <div>Electric Generation System Specialist III</div>	<div></div> <div>Date</div>